

### **ABSTRACT OF THE DISCLOSURE**

A CT scanner includes a gantry supporting an x-ray source and an x-ray detector. A motor in the gantry controls rotation of the gantry relative to a mounting plate from which the gantry is supported. The gantry also houses a computer for controlling the motor to rotate the gantry in a controlled, known manner. The computer also controls the x-ray source, including powering the x-ray source on and off and varying the intensity and frequency of the produced x-ray. The computer also collects data from the x-ray detector.